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Original Articles

SOME INTERESTING GENITO-URINARY SPECIMENS.*

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COMPLETE DOUBLE URETER.

THE first specimen here shown is an anatomic curiosity. It shows a complete double ureter from the kidney down to the bladder, with two separate openings into the bladder. An explanation of the embryology of this curiosity is not easy; and it is not frequent in its occurrence. I have never seen a case before this one, and yet within two days at the City Hospital this summer two such cases appeared.

TWO RIGHT KIDNEYS.

The next specimen is another anatomic peculiarity with reference to the kidney. This is from a man who had no left kidney, but who had two right kidneys; that is to say, there was a supernumerary kidney on the right side and none on the left. The upper one was located in its normal position, the extra one being on the same side, but lower down toward the pelvis, lying in the right iliac fossa. It received its blood supply as follows: the renal artery from the right common iliac and an extra twig from the abdominal aorta passing over instead of under the kidney, and entering the hylum through a fissure at its lower edge. The renal vein entered the right common iliac. The ureteral openings of both these right kidneys were placed one on each side of the trigone, at the sites of normal ureteral openings.

DILATED KIDNEYS AND BLADDER.

The next specimen is one of dilated kidneys and bladder, the result of a neglected stricture. The bladder, as the result of the alcohol in which it has been placed, is at present contracted, smaller than it was in the fresh state, but even now you can see that it is widely dilated; and there is a pronounced dilatation of both kidneys, the condition of hydronephrosis being approximated. Both ureters are also enlarged. This condition, as is readily apparent resulted from the continued backward pressure from neglected strictures in the urethra. The man could undoubtedly have been relieved by proper treatment, and his bladder and kidneys retained in a normal state by appropriate measures undertaken in time.

GONORRHEAL KIDNEY.

The next specimen is one that I show through the courtesy of Dr. Nietert, Superintendent of the City Hospital, and I think is very remarkable. It is a gonorrheal kidney, and the history of the case is peculiar in that no history of gonorrhea could be obtained from the patient during life. This patient, F. F., age 54, single, a laborer, entered the City Hospital July 24, 1899, in a semi-comatose condition, which resembled that of uremic intoxication, and he remained in this condition for the most part of the six days that he lived thereafter. As a result, but little definite and reliable history could be obtained from him. He said, however, that he had never had venereal disease; neither gonorrhea nor syphilis. He said that some twelve years ago he had noticed a heavy pain in the region of the kidneys. There had been frequency of urination and the passage of only a small amount each time. Since that time there had constantly been a sediment in the urine. Of late years there had been gradual increasing development of lassitude, constant headache, vertigo, failing vision, anemia, indigestion, sleeplessness, dyspnea on slight exertion, and loss of flesh. For three weeks before entering the hospital he had daily chills and fever, and other symptoms that were interpreted by him as malarial. In the hospital his blood was examined and the plasmodium malariæ was found. Physical examination showed marked arterio-sclerosis, marked anemia, and lack of nutrition. There was a limited movement of the chest walls, dyspnea, and sunken abdomen; edema of the lower extremities, especially of the left, and edema of the lower eyelids. Urine, sp. gr. 1014; alkaline, yellowish, large amount of albumin; heavy milk-like deposit, containing epithelial cells undergoing fatty and granular degeneration; epithelial casts; a few hyaline casts, and a great many leucocytes and crystals (triple phosphate).

Ante-Mortem Diagnosis. — Chronic parenchymatous nephritis and malarial intoxication. Treat-

*Presented before the St. Louis Medical Society, Sept. 23, 1899.

ment: quinin, stimulants, and diuretics. The patient gradually grew worse, and died July 30th. Post-mortem report: heart area about normal; upper lobe of left lung contains numerous fibromata and tuberculous cavities: lower lobe contains much air; right lung, numerous fibromata throughout, cavities at apex; marginal emphysema (vicarious); spleen enlarged, capsule thickened, pulp anemic. The left kidney showed the following: fatty capsule, about as usual; tunica propria removed with extreme ease; the kidney is pale; the remains of a septic infarct and several cysts are seen on its surface; cortex pale and cortical markings indistinct. Right kidney: ureter immensely thickened; fatty capsule present; tunic very much thickened, and removed only with the tearing of the kidney substance. On section it is seen that the whole of the medullary and cortical portions are broken down into partly separated cavities, containing a large quantity of pus and decomposed urine, and lined with gangrenous membrane.

A specimen of pus taken from this kidney by Dr. Gradwohl, Bacteriologist to the Hospital, was examined microscopically and subjected to culture experiments. Under the microscope, diplococci were observed within the pus cells, and they responded to the Gram test, as do gonococci, being freed from the stain by washing. Inoculations were made on the medium recommended by Young and Hagner (urine agar), and pure cultures of the same diplococci were obtained, which also responded to the Gram test. We know that gonococci wander through the different parts of the body producing various gonorrheal inflammations, arthritis, endocarditis, etc., but instances of gonorrheal kidney, such as the specimen here shown, are, I think, very rare. The ability of gonorrhea to attack and destroy solid tissues has been shown by Wertheim, and this is a case well illustrating that fact. The whole of the secreting and excreting tissue of the kidney is destroyed in this instance. No organisms were found other than those of gonorrhea. Of course, if the patient's case had been completely and accurately diagnosed, and also if his condition had permitted it, he might have been relieved of this gonorrheal kidney by nephrectomy; but, aside from the question of diagnosis, his condition was so low that he could not have been operated upon at any time during his six days' stay at the Hospital before he died.

URINARY LITHIASIS.

The next case is a whole clinic in itself—one of urinary lithiasis. The patient had been in the Hospital twice during the last year. The first time in the early spring, and the last in July. Previous to that time he had been under the care of other surgeons. In July, when he was in the City Hospital, and when I saw him, he gave a history of having been sick for twenty-six of the twenty-eight years of his life, so that he really could not remember a day of health. When two years old he was said to have shown the effects of the condition that was afterwards learned to be connected with disease of his kidneys. At the time of his entrance into the Hospital he was a mere skeleton and extremely anemic. He complained of numerous symptoms connected with the urinary organs, principal among which were severe pains in the region of the kidneys and urethra, constant desire to urinate, and there was a frequent deposit of pus in the urine. Drs. Witherspoon and Amyx examined his bladder with a cystoscope, and found there a large amount of inflammation of the mucous membrane. They also definitely determined that the urine came from both ureteral openings. In view of the post-mortem developments, this finding is of great importance. As there was a larger amount of inflammation around the left than the right ureteral opening, and also because the patient complained more of the left than the right renal region, it was considered proper to do an exploratory nephrotomy on the left side. This was done through the lumbar region by me; a renal and peri-renal abscess was opened up, and a stone about the size of the end of the little finger was removed from the tissue of this left kidney. Free drainage of the abscess of the kidney was secured, and the patient was returned to his bed. His debilitated condition absolutely prevented the consideration of nephrectomy, which operation, if it could have been done, would no doubt have secured him some lasting benefit. It was necessary to perform the operation rapidly in order to get him off the table alive. He lived for only a week or ten days afterward, and then died of exhaustion. It may be said that the operation of nephro-lithotomy, and the drainage that was secured thereby, did him the service of relieving him of the continued septic fevers to which he had been subject a long time before the operation. On post-mortem the organs were found to be in the following state, as illustrated by the specimens which I now show you: the left kidney was tunnelled by an abscess cavity, communicating by drainage tube with the lumbar wound which I made in operating. A smaller cavity showed the location of the stone. The left ureter was very largely thickened, and contained in its channel was the calculus here shown. It seemed to fill up the ureteral channel completely; but, as I mentioned, the cystocopic examination disclosed the fact that urine passed through it, notwithstanding the presence of the stone. The right kidney was even larger than the left.

The patient was a sufferer from lithiasis from the time of his birth. At one time Dr. Senn of Chicago operated on him by supra-pubic cystotomy, and maintained drainage for a time, but it gave him no lasting benefit.

ADENO-CARCINOMA OF PROSTATE AND BLADDER.

The next case, which was quite a puzzler, was also a patient at the City Hospital, and under the care of Dr. Amyx, Assistant Superintendent. The patient was 54 years old, and came to the hospital one afternoon complaining that for twenty-four hours he had not been able to pass any urine at all, following a trip to the top of the Custom House. On entering, his legs were swollen with edema, and he was complaining of the intense pain from complete retention. Dr. Amyx tried various methods of catheterization, soft catheters, flexible catheters and metal catheters being used, but he was unsuccessful in all his attempts, so he had finally to resort to the trocar and canula and draw off a large quantity of urine. On the same evening, I made similar attempts at catheterization, but was unable to introduce the catheter further than the prostatic region. A large mass was noticed in the rectum, which we supposed to be an enlarged prostate.

In view of our inability to enter the bladder by the normal route, I made a perineal opening into the prostatic urethra, and tried to introduce different forms of catheters or to make my finger pass to the bladder cavity, but was unsuccessful. The mass was jammed so closely against the pubis that no instrument would pass through except by being forced through the solid tissue of the growth. It was a remarkable case in this respect; I have never seen one like it. We immediately did supra-pubic cystotomy, and then learned what was the condition inside of the bladder. With the assistance of the knife, perineal drainage was effected, together with that through the supra-pubic route, and the patient was placed back in bed. Relief from his retention was, of course, secured thereby, and he was comfortable, but the operation did not prolong his life, in that he died two days later. It was only by post-mortem examination that a complete diagnosis was made. As you can see, a mass of hard, solid tissue has taken the place of the prostate and posterior wall of the bladder. It has obstructed the outflow of urine so effectually that the kidneys have become sacculated, as you see. Dr. Bartlett, pathologist to the hospital, kindly made a microscopic investigation of the tumor, and found it to be adeno-carcinoma. A peculiar feature of the clinical history of the case is that there had been no marked complaint of urinary difficulty up to within a very short time before he died. There had been an inability to urinate—probably some hindrance to the outflow—but the complaint was not of the degree that was to be expected in such a condition as found in post-mortem.

CALCULI IN THE KIDNEY.

The next specimen is one of the most beautiful that I have ever seen. It consists of a kidney with 7 or 8 calculi lying in the kidney tissue and one or two within the pelvis of the kidney.

URIC ACID STONE.

The next one is a uric acid stone which I removed from a movable kidney of a woman. She had been suffering from severe pains in her back since childhood and a large number and various kinds of treatment had been applied for years, without relief. The operation that I did, nephro-lithotomy, to which was added the anchoring of the kidney into its proper place, afforded her great relief and restored her to health which she has been enjoying for years.

A WILLOW SWITCH IN THE BLADDER.

The next specimen was quite surprising at the time of the operation. The patient, I knew, had a stone in the bladder and I operated for the purpose of removing it, but I did not expect to find this specimen: a willow switch about 4 inches long, incrusted with phosphatic material, evidently of from three-fourths to an inch and a half in thickness. The patient afterward admitted that he had shoved a willow switch into the bladder through the urethra for the purpose, as he said, of increasing the size of that channel. The switch had broken off and remained in the bladder until the time of the operation. He obtained relief afterwards.

URIC ACID STONE.

The next is a small uric acid stone that I removed from the bladder of a young man 21 years of age, during last spring. His uric acid tendency was very marked, so that he required treatment on this account for some time to relieve the cystitis accompanying it.

RENAL CALCULUS.

The next is a calculus that came from the kidney. The renal calculus being nearly always primary, it is therefore seldom phosphatic in nature; whatever the original nucleus of this calculus, it is evident that the bulk of it is phosphatic; and the pyelitis resulting was accompanied with alkaline urine, an exception to the general rule.

AN ELONGATED PREPUCE.

The next specimen is an oddity in the way of a prepuce, for which I did circumcision. It is about one and one-half inch in length.

HYPERTROPHIED PROSTATE.

The next three specimens illustrate differing modes by which hypertrophied prostate causes obstruction to the urinary outflow. They are simply pathologic specimens, for which no operation was done in life.

OBSTRUCTIVE PROSTATIC HYPERTROPHY.

The next one is a specimen showing obstructive prostatic hypertrophy, and also the effects of the Bottini operation for that condition. This specimen is also from a patient at the City Hospital, and the whole course of the case was under the direct observation of the Superintendent of the Hospital and his corps of assistants. The patient was a man of 65 years of age. On arriving at the hospital he showed

his feebleness as well as his age by anemia, debility and lack of tone in all respects, besides inability to urinate, which had existed for a considerable but indefinite length of time. At the time he entered the hospital, on applying the test for residual urine, 28 ounces were drawn after he had passed all that he could voluntarily. The man had been in the habit of urinating from thirty to thirty-five times in the twenty-four hours. He had tried the effects of catheterization without any relief. Involvement of the kidneys was shown in the presence of albumin, casts and pus in the urine. I performed the Bottini operation under local anesthesia (cocaine), without any shock to the patient and without hemorrhage. The only indication of bleeding was the tingeing of the solution used for irrigating the bladder after the operation. Usually in this operation three incisions are made into the prostatic tissue, but because of the debilitated condition of the patient I considered it best to make only one incision, and get him off the table. That incision was made posteriorily, at what might be termed the junction of the median with the right lobe. The patient was kept in bed a few days after the operation, and it was ten days or more before any definite evidences of improvement were observed. Until the second or third day after the operation the patient was less able to pass water than he was before then, so that one or two catheterizations became necessary. After the tenth day evidences of improvement were noticed in the gradual decrease in the amount of residual urine corresponding with decreased frequency in urination, affording him opportunity to obtain more sleep. In about three weeks after the operation he had about 10 to 12 ounces of residual urine; in about four weeks something like 3 or 4 ounces of residual urine; and after that it came down to 1 or 2 ounces. In six weeks after the operation he was required to urinate only about seven or eight times in 24 hours, instead of thirty to thirty-five times, as had been the case before the operation. He declared himself as vastly benefited. He said that he could now enjoy a night's sleep, something he had not experienced for a number of years, and other evidences of improvement were correspondingly noticeable. The patient also suffered from a hernia that was quite extensive, and gave him pain. I had in view the idea of presenting him to this society, and proposed it to him; he consented, but asked that the presentation be postponed until he could have his hernia operated upon, and then show himself well in all respects. I finally agreed to this, and he was turned over to the general surgical staff. The result was not fortunate. The wound became septic; infection and gangrene of the scrotum and right testicle ensued, followed by gangrene of the right lung, erysipelas of the face and gangrene of the bladder. He died within a week after this operation. The post-mortem specimen that I show you here illustrates beautifully the form of hypertrophy that produced the obstruction to the outflow of urine, and likewise shows the effect of Bottini's incision that I made. When I bring the surfaces of the incision together, the collar surrounding the urethral outlet of the bladder is readily apparent, and it can be seen why there should have been so much interference with urination (28 ounces of residual urine), and likewise the dilated condition of the bladder to which it led. An elevated ridge surrounds the opening, and during life probably acted like a puckering-string might do, falling together from the pressure of the urine on the inside, resulting in a tighter closure the greater the pressure, up to a certain point. The electro-incision made now enables me to separate the wound-surfaces, showing a marked groove through the prostatic collar alluded to, indicating the channel of freer outflow for the urine that resulted from the operation.

This specimen also shows the inter-ureteric fold of the bladder, and elevated fold of the mucous membrane extending from one ureteral opening to the other. The importance of this structure comes from the fact that it is liable to be burned through in the Bottini operation unless provision is made to prevent it. Freudenberg met with such an accident in one case, causing suppurative peritonitis and death. To ward against the possibility of such an occurrence he then advised the distention of the bladder with boric acid solution preliminary to doing the operation. For various reasons not necessary to state here, I suggested the substitution of air for the solution, and used it satisfactorily in several cases. Since then Freudenberg has adopted the suggestion, as indicated in a personal letter to me, printed in the *New York Medical Record*, July 1, 1899. A later communication said that he had used it in fourteen cases.

COMBINED SUPRA-PUBIC AND PERINEAL PROSTATECTOMY.

The next specimen consists of the whole of the right lobe and greater portion of the left lobe of a prostate, removed by combined perineal and supra-pubic incision. The patient was 79 years old. His retention of urine, which had been complete for some time before the operation, was relieved by that procedure, but just about that time the patient died, in which respect we were disappointed. It is my opinion—and also that of Dr. Nietert of the City Hospital—that the only operation that stood any chance of relieving this patient was the Bottini. I tried to do this at first, but did not succeed in getting the instrument into the bladder, even under anesthesia, and was compelled therefore to resort to the other procedure. Besides his old age and marked debility, the patient had granular kidneys and was passing about 120 ounces of urine in 24 hours; he had been giving evidences of uremic intoxication for

more than a month previously. If the Bottini incision could have been made, a groove through the obstructing prostatic tissue would have allowed of improved drainage of the bladder without, probably, adding materially to the debility and shock, since there would have been two seared, non-bleeding surfaces of small extent, instead of large surfaces, open to infection and tending to bleed, etc.

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SOME POINTS IN THE ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE FORE-BRAIN.*

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THE essential constituents of the fore-brain are the following: First, the cerebral cortex, which covers like a cap a mass of fibre systems, which for the sake of simplicity we can divide into projection fibres, association fibres, and commissural fibres. Of projection fibres we have two different kinds—centripetal or sensory projection fibres, which, coming from the various sensory surfaces, project, as it were, the outer world on to the cerebral cortex, and centrifugal or motor projection fibres, which, in their turn, project impulses from the cortex to the motor apparatus of the body. The association fibres bind or associate the various cortical areas of one hemisphere with each other. The commissural fibres connect the various cortical areas of one hemisphere with those of the opposite hemisphere. Until recently it was held that the fibres of the projection system radiated alike to all parts of the cerebral cortex. The recent embryologic researches of Flechsig have shown that only about one-third of the cortex receives projection fibres; the remaining two-thirds receive no projection fibres. These areas, which are connected only with association tracts, Flechsig terms association areas. The intelligence of any animal varies directly as size of its association centres.

The centers of the cortex receiving projection fibres are termed projection centres.

The projection centres are situated always about the primary fissures. We can distinguish the following projection centres: 1. The tactile projection area, the most extensive of all. It comprises the two central convolutions, the para-central lobule, the adjacent part of the gyrus fornicatus, and the posterior part of the three frontal convolutions. This is the area for tactile, thermal, articular and muscular sensations for the entire opposite half of the body. Throughout this area we find giant pyramidal cells. They are the origin of the motor tract.

*Read before the St. Louis Medical Society of Missouri, June 17, 1899.

The olfactory area comprises the trigone, the neighboring part of the convolution of the corpus callosum, the anterior or perforated substance, the unciform gyrus and the neighboring part of the hippocampal gyrus. The olfactory sense is rudimentary in man, but is enormously developed in some of the lower animals, *e. g.*, in the carnivora. The visual projection area is located about the calcarine. The centripetal fibres come from the optic thalamus, the external geniculate body, and the superior surface of the corpora quadrigemina. Those fibres coming from the external geniculate body terminate exclusively in the walls of the calcarine fissure. The remaining centripetal fibres find their termination in neighborhood of this fissure. The centrifugal fibres of the visual area are united to the optic thalamus of the same side. This is connected in its turn with inferior ganglia, and also with the Rolandic area. This serves to explain the influence of visual sensations upon certain bodily movements. The auditory area is situated in the first temporo-sphenoidal convolution. This area is united by centripetal fibres to the superior surface of the corpora quadrigemina and to the internal geniculate body. The temporal cortico-protuberantial tract, passing in the external fourth of the cerebral peduncles, connects this area with the nucleus of the pons. It innervates all of those muscles connected with movements of the ears. Besides these fibres of projection which unite the various projection centres of the cortex with the inferior ganglia of the neuraxis, there are other centripetal and centrifugal fibres in each projection centre, which unite it with the optic thalamus of the same side.

The tactile projection area is more extensive than all other centres combined, thus bearing out Herbert Spencer's dictum that the intelligence of an animal varies directly as its sensations of touch.

This disproportion between the extent of the tactile centre and the other centres should be in no way surprising. The various sensory centres of the cortex are only the projections of the sensory surfaces in which the peripheral nerves terminate. The olfactory centre is small, inasmuch as it is only the duplicate of the very small mucous surface of the nasal fossæ, in which the olfactory fibres originate. The auditory centre reproduces in the fore-brain the sensible surface of the organ of Corti in our internal ear. The visual projection centre duplicates the extent of the retina.

To these three centres only sensations from the external world are transmitted. On the contrary, the tactile sensations, under all its forms, are localized in the entire extent of our cutaneous surface and many of the mucous surfaces, such as the nasal fossæ, conjunctiva, in the cavity of the mouth, in the tongue and palate, with their sensations of taste, and

in the surfaces of the pharynx, larynx, and organs of generation.

No wonder, then, that the fact of the cortex on which is projected the tactile surface of opposite half of the body has such a great development.

Again, on the tactile area, or motor zone (so-called), are projected all of the organ sensations coming from the interior of our body, telling us of their condition and position, comprising the various sensations from our viscera, and also from our muscles, joints, etc. In this way the tactile area controls our different bodily movements. All of these projection centres having both centripetal and centrifugal fibres are thus senso-motor centres. There remains yet to be considered the most important centre in man, the psychic or intellectual centre. The great posterior association centre comprises the pre-cuneus, a portion of the lingual gyrus, the fusiform gyrus, all of the parietal gyri, the inferior temporal gyrus, and the inferior and anterior part of the external surface of the occipital lobe. The Island of Reil constitutes the median centre of association. The anterior centre of association is situated in the anterior part of the superior frontal convolution, in the greater part of the middle frontal convolution, and in the straight convolution formed on the inferior surface of the frontal lobe.

The projection centres, then, only occupy one-third of the surface of the fore-brain, while the remaining two-thirds are occupied by the association centres. All of the impressions received by the peripheral terminations of the sensory nerve fibres are conducted to either the tactile, visual, auditory, or olfactive projection centres, by a series of superimposed sensory neurons.

These impressions are then transmitted to cells of origin of the motor fibres, and thus descend through the superimposed motor neurons, reaching in this way the muscles of our bodies.

The projection centres, considered in themselves as completely separated from the association centres which surround them, are in one respect nervous centres for reflexes of cortical origin.

We find the projection centres in the brain of all mammals sometimes even more largely developed. On the contrary, the association centres, so large in man, become smaller and smaller the lower we descend in the mammalian series. They are totally wanting among rodents. They are feebly developed in the carnivora. In the higher apes they equal in size the projection centres. In man alone do we find such an enormous development of the association centres. Inasmuch as no projection fibres go directly to the association centres, no excitations from within or without the organism can reach these centres save by way of the projection centres.

The association zones are solely and exclusively in connection with the projection centres by means of centrifugal or centripetal fibres. The centripetal fibres, coming from the projection centres, transmit to the association centres every sensation which arrives in them from within or without the body. It is within these association centres that every sensation perceived leaves an ineffaceable imprint constituting a memory. In these higher centres are identified, combined and fused these various tactile, visual, olfactive and acoustic sensations which reach the projection centres. Here sensations are compared with each other and with memories of previous sensations. It is here that we find the indispensable elements of intellectual life. In the adult, the association centres form the anatomic substratum of what is known as experience, will, knowledge, memory, self-consciousness, moral and esthetic sentiment. Centrifugal fibres arise in the association centres and terminate in the projection centres. They thus hold these latter areas in subjection and exercise an inhibitory control over them. By means of these fibres the association centres can react upon the giant cells of the motor tract and thus produce voluntary movements; for they are due only to the vivid revival of motor memories. The centres of projection thus preside over animal life; by means of them the organism can assuage its corporeal needs. The centres of association preside over the intellectual and moral life. They are genuine organs of mind in its highest sense. It goes without saying that these latter centres can vary greatly in different individuals. Rüdinger long ago pointed out the extreme size of the posterior association centre in the hemispheres of men of genius, amounting to as much in some cases as almost half of the cortical surface. The great posterior association centres is very small in idiots, imbeciles and backward children.

The different association centres do not have equal value. The posterior centre is united on one hand to the tactile projection centre, on the other to the auditory and visual projection centres. The middle association centre is interpolated between the auditory and tactile sphere.

The anterior association centre is between the tactile and olfactive centres. According to Flechsig, the anterior centre is the centre of the complex memories which go to make up the ego or personal consciousness. Lesions of this centre are accompanied by a pronounced change of personality in some cases, in others by loss of abstraction and will. In the middle association centre in the Island of Reil are stored auditory memories and motor memories of the muscles of the lips, tongue, vault of the palate, and larynx. The great posterior association centres put us in direct communication with external world, inasmuch as in them are stored up visual, tactile and auditory memories.

The intellectual centres constitute then for the projection centres real superior nerve centres, and just as the projection centers exercise an inhibitory control upon all centres beneath them, so the association centres dominate and control the projection areas. By its projection centres the organism tends only to satisfy the senses and cater to blind desires and impulses. The association centers modify sensuality by reason, blind instinct, with moral ideas. In the normal human brain the action of the association centres is predominant; but when their inhibitory control is abolished by an anomaly of development or paralyzed by intoxication or disease, the activity of the projection centres then becomes predominant. The blind and brutal instincts of the beast have free rein; passions and impulses are unchained—conscience, morality, control, and responsibility are gone. We all know how well this is shown among idiots, in certain stages of alcoholic and other intoxication, in many epileptics and certain insanities. What are now termed association centres were formerly termed by Exner "latent areas," because a tumor situated in these areas gave rise to no focal symptoms. The explanation of this is that only lesions of projection areas will give rise to focal symptoms. The symptoms due to lesions of association centers will be purely mental, and can only be determined by a most accurate psychologic examination. In the light of these ideas we can now frame a better definition of insanity. Long ago Griesinger pointed out that insanity was a diffuse disease of the cerebral cortex. We can now reform this definition by saying that insanity is a disease of the association centres and tracts of the fore brain. Insanity is more particularly an alteration of the personality. The profoundest alteration or loss of the personality is found in the chronic secondary insanity and terminal dementia. It is precisely in this class of cases that Meynert demonstrated that the atrophy was most pronounced in the frontal lobes, which, as before shown, contains the association centre of personality.

Notes and Items

The following is the program of the St. Louis Medical Society of Missouri, Saturday evening, November 18th, 1899: "Christopathia, Bibliopathy and Christian Science," by Dr. Charles H. Hughes. "Cases in Practice: 1. Adenocystoma Hepatis; Operation; Recovery. 2. Polycystic Degeneration of Both Kidneys," by Dr. J. B. Ross.

The editorial game laws are stated in an eastern publication to be as follows: "Book agents may be killed from October 1st to September 1st; spring poets, from March 1st to June 1st; scandal mongers, from April 1st to February 1st; umbrella borrowers, from August 1st to November 1st, and from February 1st to May 1st. Every man who accepts a newspaper for two years and on being presented with the bill says, 'I never ordered it,' may be killed on the spot without reserve or relief."

The last issue of the Public Health Reports shows that extraordinary precautions are being taken along the Mediterranean Coast of France to prevent the introduction of the plague. A special difficulty is met in the quarantine regulations there, by the numerous small fishing vessels which ply regularly between African and European ports. These small boats are especially numerous in the departments of Vendee, Loire, Inferieure, Morbihan and Finistere. At Nantes very few merchant vessels are reported from Spanish or Portugese ports. This is due to the fear of a rigid quarantine against these countries.

Consul Campbell, writing from Port Louis, Mauritius, under date of August 29, 1899, states that the plague is still increasing. In the course of its development the disease has assumed a new phase. Recent bacteriologic examinations have discovered a form of pneumonic plague which is very contagious. The first victim of the new form of the disease was a Mr. Johnson of the Colonial Service office, and the first white man attacked by the disease. Mrs. Johnson was infected while nursing her husband. The physicians, in her case, instead of using the Haffkine method, treated her with Dr. Roux's specific. The former is said to prevent the disease, while the latter is curative. Mrs. Johnson recovered.

At a recent meeting of the Clinical Society of Maryland, Dr. Barker, in discussing the etiology of yellow fever, stated the controversy over the bacillus X and the bacillus of Sanarelli as follows: "Very soon after Sanarelli's publication Dr. Sternberg read it carefully, looked up his old report, and found that the bacillus X in many of its characteristics corresponded to the bacillus of Sanarelli. He also found his organism in about half the cases examined associated with other organisms. He believed it to be a secondary infection. If the bacillus X and the bacillus icteroides were identical, and the cause of yellow fever, then the discovery was his. If they were not, then his contention of 1890 was sustained. Reed and Carroll immediately began work upon the bacillus X and the bacillus of Sanarelli. They found that they were not identical, but the bacillus of Sanarelli reminded them of that of hog cholera. One example of the hog cholera seemed to be identical with the organism of Sanarelli. Their report was followed by an article from Sanarelli, in which he suggested that Reed and Carroll had used mixed cultures and worked with hog cholera instead of his organism. He pointed out several differences between the two organisms, and stated that the growth of the two upon potatoes was quite different. He suggested that Carroll and Reed were quite unfamiliar with the

literature of the subject, and advised them to study it up; but it turns out now that the germ to which Sanarelli attributed their differences was not hog cholera, but the bacillus of swine plague. This demonstrates to the satisfaction of Dr. Barker that Sanarelli was also not familiar with the literature of the subject.

That there is nothing new under the sun is again exemplified by the assertion of Dr. Weiss, that Koplik's sign of measles has been described. Singularly enough, the discovery is not made in very ancient literature, but in Nothnagel's Practice, which quotes a Danish physician by the name of Flindt. "Second day of fever.—A spotted exanthema may be seen on the anterior surface of the soft palate and on the mucous membrane of the cheeks and lips. This shows a remarkable appearance due to numerous minute bluish white, shining and apparently vascular points, which lie in the center of small red spots and arranged in irregular groups. One can feel as well as see the small vesicles projecting out above their surroundings. A similar formation is to be seen on the palpebral conjunctiva. Third day of fever.—Very similarly grouped spots are visible on the buccal mucous membrane, especially on that part of it lying opposite to the space between the upper and lower back teeth. At this stage, the skin eruption first makes its appearance."

Comparing this description with a plate recently published in Tuttle's work on diseases of children, leaves no question that the older writer was describing the same appearances noted by Koplik.

The extent and variety of food adulteration was recently brought out in an address by H. C. Adams before the Farmers' National Congress in Boston. We quote:

"The clumsy wooden nutmeg of Connecticut, that even a policeman might detect, has given away to artificial eggs that no hen would recognize and to artificial butter that never knew milk. The universal demand for cheap things brings a supply. Wheat flour is adulterated with corn flour; buckwheat with wheat middlings. Vermont maple syrup is made that never saw Vermont and is made from the sap of trees that grow in Chicago. Glucose has dethroned cane syrup. Cider vinegar is distilled from grain. A good portion of the strained honey of commerce never produced any strain upon the bees. Milk is robbed of its cream, filled with lard and sent all over the world to ruin the reputation of American cheese. Oysters are partially embalmed with chemicals. Lemon extracts are made without lemon oil, and vanilla extracts without vanilla. The hogs of the North compete with cheap cotton-seed oil of the South and mix in the same tub under the banner of lard. Artificial smoke is made for hams out of poisonous drugs. Jellies are colored in imitation of the natural fruits and sold as fruit jellies flood the markets, although they are almost as destitute of fruit juice as a bar of pig iron. The embalmed beef business has been exaggerated, but we do not need any for either soldiers or civilians. Canned fruits are preserved with antiseptics which delay the digestive processes. Baking powders under various misleading names crowd the markets. Spices enriched with pepper hulls and ground cocoanut shells are manufactured and sold by the ton. The close partnership which has existed for so many years between coffee and chicory does a thriving business in many States under the firm name of coffee. Cheapness is secured by these adulterations and false labelings, but the people are defrauded."

The recent appearance of the plague in Portugal has led to an extended discussion in England of the possibility attending its introduction to London or other large English cities. There is a wide difference of opinion expressed, some being profoundly sceptical of the possibility of an epidemic developing in England, while others are quite convinced that the danger is a real one, and that active measures should be at once instituted to ward off the danger. W. J. Simpson says: "Since its advent, plague has caused in India over two hundred and fifty thousand deaths, the worst feature being its annual recurrence. Poona was but recently in the throes of its third epidemic, over one hundred and fifty dying per day. If a similar mortality prevailed in London, the metropolis would lose over ten thousand persons per day. The mortality in England was all the more serious, as, from a personal inspection of the town, he could state that, if inefficient drainage be excepted, which allowed waterlogging of the soil, it was no worse as regarded sanitation and overcrowding than hundreds of towns of similar size in Europe, and was certainly in much better condition than many. The reappearance of plague in Egypt after fifty years, with its extension into Portugal, was a matter of profound interest, because it indicated that this plague from China partook rather of the nature of a pandemic than an epidemic, and possessed that which other plague epidemics for nearly the last two hundred years had lacked, namely, the quality of diffusiveness which defied the precautions even as revised by the Venice conference and hitherto adopted against its progress."

The last reports regarding the epidemic in Oporto, show that there has been a slight increase in the disease, which for a few days was thought to be well under control. In addition to Portugal, the disease has appeared in Northern China and the Ladrone Islands. A vessel reached Plymouth, England, October 14, from Bombay, with one of the crew ill with the plague. The disease developed only a few days before the arrival of the vessel at Plymouth.

MEDICAL REVIEW

A WEEKLY JOURNAL OF MEDICINE AND SURGERY

EDITED AND CONDUCTED BY

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THE MEDICAL REVIEW, LONDON, AND THE MEDICAL REVIEW, ST. LOUIS.

The editor of the *Medical Review*, published at London, suggests a plan which will obviate any errors in giving credit to his journal or our own. His letter is self-explanatory:

LONDON, S. W., 31st October, 1899.

The Editor, MEDICAL REVIEW,
St. Louis, Missouri, U. S. A.

Dear Sir:—My attention has been called to your editorial paragraph (p. 245, Sept. 30), commenting upon our change of title. I regret exceedingly that my secretary did not communicate with you in accordance with my instructions. It was my intention to write to you personally, but unfortunately a brief and somewhat painful illness prevented. We have requested our contemporaries, both in Great Britain and abroad, to refer to this journal as the Medical Review, London, when quoting our pages, and I would venture to suggest that journals quoting your columns be asked to refer to your journal as the Medical Review, St. Louis. In this way I think confusion as to the source of any article quoted from the pages of either journal can be easily avoided.

Complimenting you upon the excellence of your admirable periodical,

Believe me, dear Sir,
Yours very truly,
NATHAN E. BOYD.

THE MEDICAL MANAGEMENT OF THE NEW CITY HOSPITAL.

Several bills have been introduced into the Municipal Assembly of St. Louis looking towards a change in the plan of conducting the City Hospital. The last of these bills met the same fate as the previous ones, being disapproved by a large majority.

Even a cursory glance at this bill, which was discussed before the St. Louis Medical Society on November 11th, shows that it contained numerous glaring defects. For instance: it is hardly necessary or desirable to include the Insane Asylum and Poor House in the scheme; it is unwise to attempt a change until the new hospital is erected; there is no provision for the dismissal of an attending physician for neglect or incompetence.

Another serious objection is found in the provision that the staff shall be proportionate to the number of students in the schools of medicine (i. e., regular, homeopathic, etc.) which maintain colleges in the city. If such a system were inaugurated every "pathy" on earth would maintain a college in St. Louis, to say nothing of the new pathies which would spring up like mushrooms.

When the new hospital building is completed, there will be from 800 to 1000 patients constantly within the institution, and it is quite reasonable to doubt if the present method can be continued under such conditions. The business and professional demands will be too great for one man to accept the responsibility. To us two plans seem possible:

1. The appointment of a non-medical supervisor and a medical superintendent.

2. The appointment of a superintendent without medical duties, leaving the medical work to be performed by internes under the direction of a non-resident medical staff.

The former appears to us hardly feasible, though those who favor the old plan may find some arguments in its favor. The latter plan, on the other hand, is in keeping with that under which most modern hospitals are conducted and should by all odds be adopted; however, it should be made entirely fair and just to the various interests concerned in the clinical instruction at the hospital.

Upwards of 2000 students annually attend the medical colleges in St. Louis, and no plan should be considered which would exclude one set or magnify the clinical resources of another.

It might be provided that the hospital shall be divided into sections, a certain number of which shall be attended by the various college faculties, each in their turn, of course under the direction of the Health Commissioner. The remaining services should be placed at the disposal of various physicians not connected with medical colleges.

In this way justice and fairness will be assured and the hospital will be placed in line with modern requirements and practice.

On no account should a change be made until the term of the present efficient superintendent shall have expired. In the first place, the city is morally obligated to continue the office, with its emoluments, honors, etc., until his term expires. In the second place, it would be a stroke of bad politics, for that gentleman's friends would naturally oppose such a bill, and thus the purpose of the contemplated change would be defeated by the antagonism thus created. In addi-

tion, the present City Hospital building is not capable of sustaining any decided change in policy, and the new City Hospital will hardly be ready for the reception of patients before the Superintendent's term expires.

If a bill is formulated along the lines indicated in the foregoing, it will doubtless have the support of the profession, the Health Commissioner, and the superintendents of the City Hospital and Female Hospital, and its passage will therefore be assured.

The St. Louis Medical Society will, within a short time, devote a meeting to a discussion of this important subject, which the entire profession will be invited to attend. It is hoped that a full and free discussion will result in a just and equable basis upon which the medical management may rest.

HAPPY PUERTO RICO!

General Orders No. 151, dated San Juan, Puerto Rico, September 26, 1899, marks such a distinct advance in sanitary science that we can only express our deep regret that many American cities are not under military government. Instead of governing our dependencies, it would be vastly better for them to govern us, and we would be heartily in favor of annexing the United States to Puerto Rico, provided that we might be allowed to share the advantages of its stable government, and especially in their regulations for the preservation of the public health. General Orders No. 151 should be framed and hung up in every council chamber and legislative hall in the United States:

1. Foods and drinks, in the meaning of this order, are all articles used for food or drink by man, whether simple or compound. The term "drug" includes all medicines used by man, whether for internal or external use.

2. No adulterated article of food or drink shall be made or sold in Puerto Rico; articles ordinarily recognized as food, which are really mixtures, may be sold if marked with the word "mixture" or "compound." No diseased, decomposed, offensive, or unclean article shall be used in the manufacture of any food, drink or medicine.

3. No person shall sell in Puerto Rico any impure, diseased, decayed or unwholsome provisions, or any adulterated bread, or any food mixed with poisonous substance.

4. No person, whether owner, manager, keeper or agent, barkeeper or clerk, in any saloon, restaurant, boarding or eating-house in Puerto Rico, shall offer for sale any food or drink containing anything poisonous or unwholesome.

5. No person owning, renting, or leasing any stall, room, or stand, where milk, meat, vegetables or groceries are sold as food, shall fail to keep said room, stall, or stand in a cleanly condition, nor shall such persons allow such milk, meats, vegetables or groceries to become poisonous or infected or unfit for food by reason of uncleanly conditions of such stall, room, or stand.

6. No person shall offer for sale in Puerto Rico any unwholesome, watered or adulterated milk or milk produced from cows which are visibly diseased, or are kept upon or fed on garbage, swill, or other deleterious substance.

7. No person shall sell any article of food or drug which is not of the nature, substance and quality of the substance demanded by any purchaser. And no person shall sell any compound food or drug which is not composed of ingredients in accordance with the demand of the purchaser.

8. No person in Puerto Rico shall subtract from any article of food any part of it, so as to affect injuriously its quality, substance, or nature; and no person shall sell any article so altered without making disclosure of the alteration.

9. All drugs sold must be of the standard quality and strength prescribed in the Spanish or United States pharmacopeias.

10. All compound, proprietary, patent, or secret remedies sold in Puerto Rico shall bear upon the bottle, box or package an exact formula stating the constituents of the medicine or remedy.

11. No pharmacist not a legally qualified physician shall prescribe remedies for the sick. Every bottle, box or package containing any medicine or drug shall be labeled with the name of the same and the name of the physician who wrote the prescription. Pharmacists shall not sell arsenic or strychnine, or their compounds, or other drugs known as deadly poisons, except upon the prescription of legally qualified physicians. Before such sale is made the name of the drug and the quantity, the name of the physician prescribing it, and also the name of the purchaser shall be entered in a book especially kept for this purpose. The purchaser shall sign his name in a book below the entry made by the druggist. Every bottle, box or package containing a dangerous drug shall be distinctly labeled "Poison," and the person shall be warned of the nature of the article.

A recent letter from Puerto Rico hails the sanitary victory in that island. It is addressed to the editor of the *Philadelphia Medical Journal*, and reads:

"Sir:—I have the honor of informing you that the existence of a single case of small-pox is at this moment unknown on this island. Nine months ago a serious epidemic was threatened, and the disease threatened to overrun the entire island. Since then 800,000 vaccinations have been performed. It is possible to stamp out small-pox in Spanish American countries. There has not been a case of yellow fever all summer. No serious diseases have followed the hurricane of August 8."

This letter is from George G. Croff, secretary of the Superior Board of Health of Puerto Rico.

Society Proceedings

ST. LOUIS MEDICAL SOCIETY.

SATURDAY EVENING, JUNE 17, 1899, THE PRESIDENT, DR. JOSEPH GRINDON, IN THE CHAIR.

DR. ARTHUR E. MINK read a paper on

Some Points in the Anatomy, Physiology and Pathology of the Fore-Brain.*

DR. CRANDALL: A continuous pressure may for a time interfere with the function of the speech centre and yet not destroy it. Upon relieving the pressure there may be a sudden recurrence of the function of the area. Another point of interest to me is the development of the sense of smell and the centres which control it. Upon examination of the brain of a small kitten, you will find the centre of smell, which is underneath the frontal convolution, much larger than in a fully developed man. In many cases I have seen it twice the size.

DR. GRINDON: I would like to ask Dr. Mink to explain a little further—that is, the location of what he describes as the association centres. Do I understand that this has been localized, or is it still largely a matter of theory?

DR. MINK: The association centres, being entirely disconnected with the external world, give rise to no localization symptoms, but only mental symptoms, which can only be determined by very accurate psychologic examinations. They are not perceptible to the crude and cursory methods which ordinary medical diagnosticians use in determining the physical symptoms and adducing the site of the lesion. It is well known that we can have very large tumors of the frontal lobes, and yet the individual never be suspected of having a tumor in that region during his life. I suppose, however, if we refine our methods, when we know more about these things and make more accurate psychologic examinations, we will be enabled to see a great many more pronounced changes than we now dream of. So far as the association centres are concerned, it is getting to be a pretty well-developed fact of brain anatomy.

It is gratifying to learn that the civil code of New York has been so extended as to prohibit a physician from divulging information concerning one of his patients, either before or after the death of the latter. Ever since the adoption of the civil code in that state, communications to physicians have been privileged, but the provision has not applied where the subject of inquiry related to insurance policies. This distinction is now done away with, and all communications made to the physician in the diagnosis or treatment of disease are made inviolate.

*See page 385, this number.

Current Medical Literature

DERMATOLOGY AND GENITO-URINARY DISEASES.

Remarks on the Treatment of Scabies.—S. SHERWELL* describes his method of treatment as follows: Usually several members of a family are infected; each one is directed to take a bath the same evening, and adults should use a sand soap over the tougher portions of the body which are involved. The body and limbs are then rubbed lightly with a little sulphur lotion; a half teaspoonful is an excess for each individual; no excess of friction is required at all. The bed linen and under-clothing should be changed, and between the sheets a few spots of sulphur should be placed in each bed, and the sheet shaken, so that the sulphur is disseminated over the whole internal surface. By repeating the powdering of the bed, and by bathing and changing clothes in about the same way every other night for a week, the cure is effected in ordinary cases. An exaggerated case will take longer, as the one takes a longer time than that to develop. One ounce of sulphur lotion is a great excess of what is needed in the ordinary treatment of a family of five. Besides being more cleanly and less irritating than the other methods usually followed, sulphur in and of itself has a direct and potent inhibitory action on other parasitic diseases, both animal and vegetable.

Iodid of Potassium in the Treatment of Acne.—F. S. LEVISEUR† observed that if patients with normal renal functions, having acne vulgaris, take gr. v. of iodid of potassium three times a day, in a glass of milk, symptoms of what might be called acne iodism appear as early as after two or three doses, and not later than on the third day. These symptoms consist in the appearance of a metallic taste, running from the nose, and a feeling of pressure in the frontal region. The local symptom consists of the appearance of nodules in the skin of the face, slightly redder than the surrounding parts, and moderately painful on pressure. At the same time acne lesions, if present, show a sudden increased inflammatory reaction, resembling the reaction occurring in and around lupus nodules after the injection of tuberculin. In fifty cases treated in this way the iodid was given in milk. In almost all cases the urine was tested for the presence of iodine as follows: Some urine poured into a test tube is mixed with one-third of its volume of ordinary corn starch. Then a drop of commercial nitric acid is allowed to run down inside the tube; the latter should be put in a glass standing on the table, so as to keep the tube perfectly quiet. If iodid is present in the urine

*Jour. of Cutan. and G. U. Dis., November, 1899.

†N. Y. Med. Rec., Nov. 11, 1899.

the drop of acid will form a streak bordered by a blue or violet color, which gradually disappears. As a rule the iodid appeared in the urine after two or three doses on the second day, and had entirely disappeared about forty-eight hours after the medication had been discontinued. A case is cited, which illustrates the manner of tratment. On the third day of the administration of the iodid, acne nodules which were present showed increased redness, swelling, and pain on pressure; a number of new lesions were also present. The iodid was stopped and the face treated locally with a mild sulphur salve and ichthyol soap, 10 per cent. At the end of the second week the patient's face had greatly improved, and the iodid was again given as before. The local reaction in the face was less intense; after three days the iodid medication was stopped, and local treatment instituted as before, and under this local treatment, which had before been inefficient, the patient could be pronounced cured at the beginning of the fifth week. Treatment must be promptly stopped.

On the Smooth Atrophy of the Base of the Tongue in Tertiary Syphilis, with Remarks on Luetic Appearances in the Upper Air Passages.—A. GOLDSCHMIDT.* This paper is a result of the study of 200 cases of syphilis. In 1863 Virchow first called attention to the smooth atrophy of the tongue in syphilis. Of the 200 cases of syphilis, 18 showed a moderate, 10 a more advanced atrophy of the base of the tongue. Is this atrophy typical of lues? The author concludes that smooth atrophy of the tongue is not pathognomic of tertiary lues. The flatness of the glandular region of the tongue may be found in conditions of poor development of the whole tongue. The tongue can take part in the degeneration of the body as well as any other organ can. Some cases of atrophy at the base of the tongue are found where there is no tertiary lues. Among 160 cases of early syphilis not one case of roseola in the pharynx was found. Sixteen cases of pharyngitis were found, and 13 cases of plaques in various parts of the pharynx. Three cases of pustules in the larynx were found.

Adenoma of the Urethra.—G. F. LYDSTON† reports a case of urethral tumor of considerable size, which did not cause obstruction to the urinary outflow. The patient, a man of 23, denied venereal disease of any kind; for three years he had pain in the hypogastrium and frequent micturition. The symptoms were intermittent, lasting a week or two, and then ceasing altogether. Examination caused great pain and spasm of the membranous urethra when the instrument passed that portion. No urethroscopic or cystoscopic examination was made. An ordinary perineal boutonniere was made, and the bladder entered with the index finger, the vesical neck being thoroughly dilated. An irregularity was felt on the right lateral and inferior aspect of the urethral surface of the bulbous region; this was dissected up with the finger, and seemed to proceed from the bulbous urethra on the right side, with a prolongation which was lost in an opening corresponding approximately to the location of the right cowperduct. Histologic examination showed the tumor to be an adenoma. The growth seemed to have developed in the direction of the wall of the urethra rather than toward the lumen. The bed of the neoplasm formed a distinct cavity. Recovery was uninterrupted, and the patient was free from all symptoms save a little increase in the frequency of micturition.

Some Cases of Bilateral Linear Nevus.—I. DYER* reports three cases of this nature, which are exceptional because of several points at variance with the exposition of the characteristics of the cases usually seen. 1. In none of them was the eruption present at birth. 2. The cases have a bilaterally symmetric distribution. 3. Each of the three cases presents a different type of nevus: the first purely verrucose, the second vascular and erectile, the third purely pigmentary. Case I. Was a boy of 8 years; the eruption was located on the face, shoulders, chest and back, distributed symmetrically, patch for patch in each lateral area; the lesions were papillary and verrucose. Case II. A girl of 17, had the eruption on the face, limited to chin, nose, alæ nasi, and slightly on the cheeks. All the lesions were erectile, and were grouped in clusters. Were first noticed five months before menstruation began, two years before she came under observation. Case III. A male infant of 21 months, presented a purely pigmentary eruption, extending from the clavicle on either side downward and outwards in a semi-circle, extending from the last dorsal vertebra to the upper border of the first rib at its juncture with the sternum. It was first noticed six weeks after birth. The first case was treated surgically, the second did not return for treatment, and in the last case the eruption slowly yielded to the internal administration of Donovan's solution.

The Treatment of Epididymitis—R. C. KENNER† considers the treatment under two heads: first, measures applicable to the stage of acute inflammation; second, remedies which hasten the removal of the inflammatory deposit. As a means of relieving the pain, the best results were obtained from the application of tobacco leaves, wet in water as hot as can be borne, and applied directly to the scrotum. Tobacco rarely causes nausia or irritates the skin. When it does not have a good effect, a poultice is applied, composed of flaxseed meal, to which laudanum has been added in liberal quantities. The to-

*Berl. klin. Woch., Oct. 23, 1899.
†Jour. A. M. A., Nov. 11, 1899.

*Jour. Cutan. and G. U. Dis., Nov., 1897.
†N. Y. Med. Jour., Nov. 11, 1899.

bacco leaves are applied fresh when they get cold. Antipyretics may be resorted to if there is much fever. To meet the second indication, strapping has given good results, but is usually objected to by the patient. Painting the scrotum with a solution of silver nitrate has brought about good results in a limited number of cases, but is not now extensively used. The best results have been obtained from the employment of iodine vasogen. This agent should be rubbed into the scrotum every three or four hours. It has hastened resolution and brought about a reduction of the swelling more speedily than any other means at command. Patients treated with this agent have recovered on an average of five days. Its use is begun after the subsidence of the symptoms of acute inflammation and when the swelling is at its maximum. It has not proved an irritant.

EYE, EAR, NOSE AND THROAT.

Eye Troubles Attributable to Naso-Pharyngeal and Aural Disturbances. J. A. WHITE* gives a résumé of the relations between pharyngeal and eye troubles, from which it is evident that disease is transmitted from the naso-pharynx to the eye by more than one way: it may be by direct microbian contamination along the lachrymal passages; by mechanical obstruction of the nasal duct at its lower end or in its canal, with resulting pathologic changes; by propagation through the blood-vessels and lymphatics; by toxin poisoning; or it may be by reflex nervous influences. It is in any or all of these ways that pathologic alterations of the mucosa of the nose and naso-pharynx can bring about secondary changes in the eye and its adnexa. The connection between the eye and the ear is one long known and discussed. Anatomically they are connected by way of the meninges and the proximity of their nerve muscles, by the anastomoses of various nerves, and by the circulation. Physiologically they are connected by the functional action of the trigeminus, by the supposed influence of the semi-circular canals, by the phenomena observed in the reaction of sight and hearing on one another, in the conjoined action of one sense on stimulation of the other. It is easy to understand why photophobia, eye pain, etc., can be a sequence of ear trouble because of the intimate nervous communication by the trigeminus branches; but it is hard to see how amblyopia can result from uncomplicated inflammation of the middle ear, even in deaf-mutism, although in such cases the visual function may be prevented from attaining its complete development, just as there may be arrest of development of the cerebral centers. Pathologic influence of the ear on the eye is exerted by both direct and indirect propagation, by way of the nerve tract, and by the blood current.

*Jour. A. M. A., Nov. 11, 1899.

The Relation of Pathologic Conditions in the Ethmoidal Region and Asthma.—C. C. RICE.* A review of twenty-five recent cases of ethmoidal disease showed that not one had been complicated by asthma in any form. It cannot be positively stated that bronchial asthma depending on nasal disorder is more rarely seen now than five years ago, but during the past two years certainly fewer cases have been observed. Where a clinical relation was to be traced between asthma and intra-nasal disease, in most of the cases there was present either marked myxomatous degeneration or well-developed polypi. Asthma does not have an intimate relationship to chronic ethmoidal disease except where either sessile or pedunculated polypi are present. The probability of an asthmatic attack ocurring with nasal disease seems to be in proportion to the degree of nasal obstruction. The passages are not much obstructed in any form of ethmoidal disease except where myxomatous degeneration is present or polypi are developed. Taking into consideration the very large number of cases of ethmoidal disease which are seen, those in which myxomatous degeneration has taken place are comparatively rare; and since this is the form of disease which is usually associated with asthma, it cannot be said that the co-existence of ethmoidal disease and asthmatic symptoms is very common. Where asthma occurs with badly obstructed nostrils, the first irritation to the bronchi may be reflex, or nervous and transient; but if the nasal obstruction remains for a long time unrelieved, and if this obstruction is due to polypi, and there exists suppuration, there will very soon develop a general catarrhal bronchitis, which in itself may prodnce asthmatic symptoms.

Purpura of Buccal Mucous Membrane Due to Iodism.—MILIAN† reports the case of a woman 43 years old, strong, and markedly alcoholic, complaining of severe headaches and pains in the legs. These pains were increased by pressure over the muscles. As both tibiæ were painful, and the crests rough, syphilis was suspected, and a specific treatment was instituted. Six grams of potassium iodid were given daily. Treatment was kept up for three days. In the night of the second to the third day patient was awakened by a severe sensation of burning in the mouth, resembling that produced by a strong dose of pepper. At the same time, on passing the tongue over the part of the palate that was painful, there came away a bloody saliva. On an examination next morning, a patch of ecchymosis the size of a ten cent piece was found on the vault of the mouth; borders were irregular, and patch was of a bright red color, and around it there were several other small ecchymoses. Besides these, there were other signs of iodism—as coryza, lachrymation, acne over chest and legs.

*N. Y. Med. Jour., Nov. 11, 1899.

†La Presse Medicale, Sept. 30, 1899.

There was no purpura of the skin. Iodid was stopped. Next day the sensation of burning disappeared. Treatment began once more, and on the second morning there reappeared the ecchymosis, though not as large as before, the bloody saliva, and the sensation of burning. Treatment was stopped permanently, and there was no reappearance of the symptoms.

Fractured Bone, with Deafness, etc. — J. A. STUCKY.* A jockey was thrown from a horse, striking his head with great violence against some rafters in a shed. He was unconscious for a short time; then complained of great noise in his right ear, deafness, and was restless. A week later he became very deaf in the right ear, followed by facial paralysis of the same side, great tinnitus, and vertigo. He presented a dazed appearance, with bulging of the right eye, and some dimness of vision. Ophthalmic examination was negative. The auditory canal was red and swollen, the posterior superior wall bulging; the membrana tympani presented a gangrenous appearrnce, with a small laceration in the posterior superior quadrant, through which offensive fluid exuded. There was some aphasia, unsteady gait, speech difficult at times and incoherent. Diagnosis of fracture of the base of the skull was made. The Stacke-Schwartze operation was performed; the periosteum was much thickened; the antrum and cells were filled with firmly adherent clots; no pus; no evidence of necrosis. The attic and middle ear were also filled with clotted blood, with evidence of inflammation of the contents. After removing the clots and inflammatory product, the parts were washed with hydrogen dioxid and the hydrogen bichlorid solution, 1 to 3000, the membranous canal brought into place and retained by a tubular tampon of iodoform gauze, and the mastoid wound dressed in the usual manner. Recovery was uninterrupted, and in one week he was discharged from the hospital, his mind clear and no disagreeable symptoms remaining.

GYNECOLOGY AND OBSTETRICS.

Ectopic Gestation, with a Report of Cases.— J. M. JOHNSON† urges the necessity of an early diagnosis being made in these cases. In cases in which the sac is not ruptured the symptoms somewhat resemble those of a normal pregnancy. In many cases there is suppression of menses, morning nausea and vomiting, the breasts begin to develop, the uterus enlarges, the cervix becomes softened and the characteristic bluish discoloration of the vagina is also present in many cases. In some cases there is no cessation of menstruation. On bimanual examination a tumor will be found to the right or left of the uterus; the growth gives a slight resisting "feel" and is tender on pressure. If decidua is cast off from the uterus and a growing pulsating tumor is present, it is very probable that the case is one of ectopic gestation. The diagnosis being made, the only thing to do is to reverse the tube containing the product of impregnation. Abdominal section is regarded as the best and safest method. In cases of rupture of the sac the patient is suddenly seized with faintness; pulse is weak and the skin cold and clammy. The extent of collapse depends on the amount of blood there is lost. The patient has an anxious expression, there is intense pelvic and abdominal pain. The pulse becomes weaker, and if the bleeding is not soon controlled the patient will die. The only thing to do is to stimulate the patient with normal saline solution and cardiac stimulants, and operate as soon as possible. Five cases are reported.

Mammary Gland Therapy in Gynecology.— J. B. SHOBER,* after a brief reference to the use of animal extracts in medicine, particularly the employment of thyroid extract in gynecology, reports the results of his experience in the use of the mammary gland as a therapeutic agent in cases of metrorrhagia and menorrhagia and in fibroid tumors of the uterus. A series of nine cases of uterine fibroid treated with mammary gland is tabulated, from which only the most general conclusions can be drawn; but it seems fair to conclude that the metrorrhagia and menorrhagia cease, the menstrual periods tend to become more regular and normal, and the general health of the patients therefore improved. This agent was also employed in the treatment of about 20 cases of menorrhagia from various causes and in a number of cases of subinvolution of the uterus. In general, the results have been more than satisfactory. The mammary gland desiccation employed is from the sheep. It is put up in tablet form, each tablet containing 2 grains of the desiccated powder, and each grain of the powder is equal to 10 grains of the fresh gland. The dose is 3 to 6 tablets daily. It would seem that mammary gland feeding has some beneficial influence upon the morbid conditions of the uterus associated with metrorrhagia and menorrhagia, and that it causes a reduction in the size of fibroid tumors. Such being the case, we have an agent which will enable us to place many of these cases in a more favorable condition for operation, and it would seem to be especially indicated after myomectomy in order to prevent development of intestinal nodules which may have escaped attention at the time of operation. The cases must be carefully selected and during treatment constantly watched, or else much harm may be done and valuable time lost in cases requiring operation.

*Jour. A. M. A., Nov. 11, 1899.

†Phila. Med. Jour., Nov. 11, 1899.

*Phila. Med. Jour., Nov. 11, 1899.

INTERNAL MEDICINE.

The Bath Treatment in Typhoid Fever.—H. E. BALLARD* advocates the use of the Brand method of cold baths in the treatment of typhoid fever in private practice. The method used is briefly described; the only serious obstacle to overcome is the probable objection of relatives. If the patient is asleep he is not bathed for fifteen minutes after being aroused; if he is sweating he is first thoroughly dried. In the course of fifteen minutes after the bath the patient is thoroughly dried and the night-dress replaced. The tub may be filled with water once in twenty-four hours. If at the end of three hours the temperature has not risen above 102.2° F., the patient is not disturbed until another three hours have passed, unless nervous symptoms arise, or there is manifest high temperature present, in which case he may have the bath sooner. The principal contra-indications for the bath are intestinal hemorrhage and peritonitis. Whenever there is evident indication for medicinal treatment it is of course used, but in the vast majority of cases there will be no call for a single dose of medicine. A case is reported which illustrates the great advantage of the bath over the cold sponge and wet pack.

X-Rays in Medical Diagnosis.—F. H. WILLIAMS.† For satisfactory medical work with the x-rays, the first requisite is an efficient apparatus; the second, experience in examining a large number of patients. Photographs are shown of the machine used for some time, which in themselves give a sufficient idea of the machine and of the method of examining patients. To avoid burns two precautions should be taken: 1, the tube should be placed some distance from the patient; in examining the chest it is well to have the fluorescent screen 3½ feet from the tube; 2, an aluminum screen, which should be grounded, should be interposed between the tube and the patient. Examinations may be made by means of x-ray photographs and by the fluorescent screen. The latter is more readily made in the chest, and has the advantage of permitting the physician to follow the movements of the heart and lungs during respiration. The most useful field at present lies in the thorax; there the x-ray examinations aid us in detecting most aneurisms of the thoracic aorta, central pneumonia, emphysema, early pulmonary tuberculosis, fluid in the chest, etc. In the abdomen, under favorable conditions, the outlines of the spleen, liver, and left kidney may be seen on the screen. By giving bismuth-subnitrate with a meal, the outline, position, and size of the stomach may be seen. Some forms of renal calculi can be recognized by x-ray photographs, while gall-stones do not cast much shadow and do not offer a good opportunity for detection by this method. This method of examination is of service also in the pelvic examination, in distinguishing gout from rheumatism, and in determining the size, position, mobility and action of the heart. These examinations may be made with great readiness in young patients, particularly in infants, who may be examined with the screen or x-ray photographs taken while they are asleep and without removing their clothing.

The Treatment of Yellow Fever by the Use of Potassium Bitartrate and Salol.—E. F. NUNZ.* This method of treatment is giving most satisfactory and successful results; it is based on the antiseptic plan, and its efficiency appears to be in direct relation with the promptness of its administration. One of the principal advantages claimed for this method is that it can be carried out without disturbing the stomach and without giving rise to disagreeable after-effects, if judiciously followed. The patient is first given a dose or calomel, followed by epsom salts, and immediately after is commenced the use of a solution of potassium bitartrate and fresh lime juice, and the salicylate of phenol or salol, the latter preferably in tablets, every two, three, four, or six hours, according to indications. The urine is rendered alkaline and the renal function is stimulated with the cream of tartar; it is also pleasant and soothing, quenches the intense thirst, relieves the nausea and vomiting, and insures free movement of the bowels. With salol a two-fold action is obtained: antisepsis of the intestinal tract and reduction of the temperature by its antithermic properties. No alcoholic drinks or nourishment are allowed during the first stage of the disease. The epigastralgia and rachialgia are treated by counter-irritation with sinapisms. During the second stage the salol and cream of tartar, with large quantities of diluent drinks, especially warm water to which a few drops of lime juice have been added, are to be continued until deflorescence takes place.

Electricity in Respiratory and Cardiac Failure.—A. D. ROCKWELL† reports a case of paralysis of the diaphragm, which illustrates the value of electric excitation of the phrenic nerve, and is a preliminary to a discussion of its relation to respiratory and cardiac failure. The summary of the discussion is thus given: 1. Direct electrization of the pneumogastric and phrenic nerves calls into activity the physiologic function of these nerves. In the case of the former the action of the heart is depressed; in the case of the latter, the respiration is accelerated and strengthened. 2. Percutaneous applications in therapeutic doses, especially with the faradic current, altogether fail to affect the pneumogastric appreciably, while the

*N. Y. Med. Jour., Nov. 11, 1899.
†Jour. A. M. A., Nov. 11, 1899.

*Phila. Med. Jour., Nov. 11, 1899.
†N. Y. Med. Rec., Nov. 11, 1899.

same method readily affects the respiratory through the phrenic nerve. 3. In respiratory failure therefore, whether due to the poison of opium, aconite, or in apparent death from drowning, electrization is a powerful antidote. 4. In heart failure from chloroform narcosis also, the faradic current is a legitimate method of resuscitation, by keeping up the respiration without depressing the heart.

The Diagnosis of Typhoid Fever.—W OSLER* discusses the question in four divisions, which illustrate the conditions under which difficulty in diagnosis is experienced: 1. Variations in the intensity of the infection. (a) The mild cases. These are cases of illness from 5 to 8 or 10 days duration, in which, with gastro-intestinal disturbance, indicated by furred tongue and diarrhea, or constipation, there is fever of slight grade; a relapse, with characteristic symptoms, or a well-defined post-typhoid lesion, may give the diagnosis; but most important is the presence or absence of the Widal reaction. The widespread application of this test will greatly restrict the cases of so-called continued fever. (b) Acute typhoid septicemia. These patients present the evidence of an acute infection of great severity without localizing symptoms. Death may occur before it is possible to reach a diagnosis, and even the Widal reaction may not be present. Post-mortem examination may show the enteric lesion, or only a bacteriologic examination may reveal the true nature of the disease. 2. Early and pronounced localization of the infection. A large proportion of cases have no intestinal symptoms; the attention must not be directed exclusively to the enteric character of the disease. Cerebrospinal, pulmonary and renal localizations of the infection are most deceptive and often lead to wrong diagnosis, which may be corrected only at a post-mortem examination. 3. Peculiarities in the symptoms. There may be no fever whatever; the onset may be abrupt; there may be no rose spots, no intestinal symptoms; the Widal test may be negative at the height of the disease; there may be leucocytosis. It is in these negative cases, which usually have fever, that the Widal reaction and blood count give the only positive data. Chills may, and often do, occur in the course of typhoid fever, and are only exceptionally due to malaria, which is the last thing to be thought of, except in cases from the tropics. 4. Typhoid fever and malaria. There is a strange readiness with which physicians diagnosticate a continued fever as malaria. In fifteen years' practice not a single instance of continued fever diagnosticated as malaria was seen which did not prove to be typhoid fever. Two clinical rules should guide practitioners above Mason and Dixon's line: (1) an intermittent fever which resists quinin is not of malarial origin; (2) in these localities a continued fever is not due to malarial infection. The practitioner should learn to suspect typhoid fever, and not malaria, in every case of fever of six or seven days' duration, particularly if it resists the action of quinin. It is high time now to regard every case of continued fever as typhoid, until the contrary be clearly demonstrated.

*N. Y. Med. Jour., Nov. 4, 1899.

Malaria and Yellow Fever; Six Cases of Double Infection.—Dr. A. AGRAMONTE,* in describing the last epidemic of yellow fever in Santiago de Cuba, says that it is not exaggeration to state that 20 per cent. of the cases were of double infection. He selects, however, six cases and describes them, drawing the following conclusions: 1, cases of double infection are commoner than generally believed; 2, both infections either appear together, changing the clinical picture of yellow, or the hematozoa remains quiescent in the system, to reappear as soon as convalescence from yellow fever is established; 3, when both infections appear at the same time, with their characteristic symptoms, the duration of the case is prolonged to two weeks or more; 4, has the presence of the hematozoa in the blood of yellow fever patients any influence over the hemorrhagic tendency of this disease? 5, in the only case of double infection where a post-mortem was performed, the ordinary lesions of yellow fever were found, together with the enlargement of the liver and the spleen due to malaria; 6, with the use of the microscope, the double-infection can be verified in all those cases where, on account of the previous history of the patient or the changes in the temperature curve, we suspect the presence of yellow fever and malaria.

Ten Years' Experience With Typhoid Fever at the Roosevelt Hospital.— W. H. THOMSON.† The whole number of typhoid fever patients treated by Thomson at the hospital was 368, with a mortality of 6.8 per cent. If only those are counted who died after they had been in the hospital a week or more, the mortality was only 3 per cent. Diarrhea occurred in only 8.7 per cent. of the cases after the first week following admission, while constipation was of very frequent occurrence. Tympanites was present in 20 per cent. of the cases, but of these nearly one-half occurred in thirty-nine soldiers who had contracted typhoid fever at various camps and in Cuba. This symptom is always regarded with uneasiness, and any method of treatment in which this symptom becomes a rarity is considered as materially beneficial. Hemorrhage of the bowels occurred in 7.3 per cent., and in no instance was it directly fatal. Relapses occurred in fifty-five cases, the tendency to relapses being more marked in some years. The use of calomel is advocated; in many cases its administration was continued into the third week, ceasing only when

*El Progresso Medico, Havana, Cuba, October, 1899.
†N. Y. Med. Rec., Nov. 11, 1899.

there was cause to fear the supervention of hemorrhage. Until the fourth week the exclusive diet is equal parts of milk and lime water; in the fourth week farinaceous gruels, preferably arrow-root, are added. From the beginning to the end of the fever, gr. x. of pepsin and gr. x. of bismuth subcarbonate are ordered every three hours. Against the general toxemia the cold bath is the best measure. The patient is put at once into the tub as soon as the temperature reaches 103° F. Rectal irrigation of decinormal salt solution is advised in all cases with severe topic symptoms, because it promotes renal elimination.

NERVOUS AND MENTAL DISEASES.

A Contribution to the Causation of Diseases of the Nervous System, Illustrated by a Case of Multiple Sclerosis Caused by Trauma.—COESTER.* Mendel, in a paper entitled "Tabes and Multiple Sclerosis and Their Relation to Trauma," emphasized the fact that trauma is an important factor in their causation, and should always be sought for. The paper is a contribution to this subject. A laborer, 36 years old, was struck on the left lower leg and foot by a mass of frozen earth, and was thrown down by its weight. A fracture and crush of the left ankle joint resulted. After six weeks' treatment, with rest and massage, the patient was able to walk about. Shortly after this his gait became unsteady, and symptoms of spinal cord involvement, especially in the motor tracts, became apparent. Ataxia, motor disturbances, were present. Knee reflexes normal; no sensory disturbances; gait unsteady. About two years afterwards disturbances in speech were noted. Seven years afterwards the picture of multiple sclerosis became fully developed, nystagmus, intention tremor, paresis of the upper extremities, spastic paresis of the lower extremities, with increased patellar reflexes, sensory disturbances in the upper and lower extremities. No sphincteric disturbances. In the psychical sphere there was a tendancy to crying without cause. The diagnosis of an atypical multiple sclerosis of the brain and spinal cord with lateral sclerosis was made. The question is, whether the accident could be brought into etiologic relation with the disease. The author believes that there is no doubt of this. The patient was perfectly well up to the time of the accident, and his symptoms developed progressively from that time.

Asexualization as a Possible Prophylactic of the Increase of Crime, Idiocy and Insanity.—D. R. BROWER† quotes a number of statistics and gives tables which furnish abundant evidence that the increase of crime, idiocy and insanity is out of due proportion to the increase in population. The study of crime, he thinks, will speedily bring us to the conclusion that the habitual criminal is largely the product of vicious parentage. The one remedy that would result in no harm to these defectives, but in great good to the community, is asexualization, and the form of asexualization recommended is by ligating the vasa deferentia and the fallopian tubes. Ligating the vasa deferentia makes no deformity; we have reason to suppose that the testicles have some physiologic function besides the seeretion of semen, and their removal, besides causing a great deformity, would do something more than prevent the propagation of the species. Ligation of the vasa deferentia is followed by only a diminution of sexual power and is as effectual in preventing propagation as castration, which is followed by complete loss of sexual power. Similar statements are true with regard to ovariotomy and ligation of the fallopian tubes. These operations for the criminal class might exclude the accidental type of criminal; for idiocy it should include all classes; and for insanity it might be limited to the degenerative types.

Brain Fatigue.—R. ELLIS* describes a case which he regards as "brain fatigue." The patient, a sensitive man of sixty, said that a number of months before, after a trying week, he noticed a dizziness and and uncomfortable sensation in the head, which increased for several days, until one morning, while writing a letter, he found that he could not remember the name of his town, though he had lived there for a long time. After resting from his work a few days he found complete relief. Six months later the mental strain, caused by too much work and worry, again became greater, and interesting symptoms were again noticed; there was a feeling of mental weariness after a few hours of brain work, then a tendency to stagger while walking; everything said or done by others seemed strange; he acted naturally and was said to be only unnaturally serious. He would think of or hear of some trifling incident, and at once it would appear to him as though he had heard it before, and would then try to remember the time and place of the occurrence. This mental condition would continue for three or four hours and then slowly pass away. During these periods satisfactory mental application was not possible. A vacation of a few weeks completely restored his nervous tone, and he returned well.

PATHOLOGY AND HISTOLOGY.

Renal Casts; Their Significance and Detection.—J. H. LINSLEY† believes that there is no disease so frequently undetermined in its incipiency as chronic Bright's disease; it occurs frequently about middle adult life and is one of the most insidious of all

*Berl. klln. Woch., Oct. 23, 1899.
†Phila. Med. Jour., Nov. 11, 1899.

*N. Y. Med. Jour., Nov. 11, 1899.
†N. Y. Med. Rec., Oct. 21, 1899.

physical derangements. Generally there is no albumin or peptone, though occasionally there is a mere trace of the former. After sedimentation with a centrifuge, hyaline casts will be found, a few uric acid crystals and crystals of calcium oxalate; often a few scattered red blood cells, leucocytes and squamous epithelia are also present. The hyaline casts and blood-cells are of the greatest significance. A description of the tubules of the kidney is given, in order to explain the formation and structure of renal casts. Conditions which give rise to the presence of small or narrow hyaline casts, epithelial casts, mixed casts, those composed of blood or fibrin, pus cylinders, fatty casts, those composed of bacteria, and the presence of cylindroids are enumerated. In the detection of casts, the specimen should be subjected to mechanic sedimentation—a few drops of the sediment placed on a glass slide and examined with a No. 2 or No. 4 objective; no cover glass is used. The specimen should be only faintly illuminated; the concave mirror is used such a way as to direct oblique rays of light through the slide and objective; after carefully examining with the low power, a cover glass may be applied and the specimen examined with a No. 5 or No. 7 objective. More light is needed and the opening in the diaphragm must be enlarged. In many cases of Bright's disease the urine may be free of any evidence of the disease; hence the great necessity of subjecting a sample of the mixed twenty-four hour specimen for analysis.

How to Preserve as Permanent Specimens Casts Found in the Urine.—L. N. BOSTON.* The urine is allowed to stand in a cool place till a precipitate collects; the supernatant urine is then decanted and an equal quantity of distilled water is added to the precipitate, and the precipitate which then collects is lifted by means of a pipette and examined under low power. If casts are present it is evaporated nearly to dryness, and a drop of the following described fluid is added to the drop of urine and thoroughly mixed with a fine needle. A cover glass is moistened by the breath and allowed to fall gently on the specimen, no pressure being used. When hardening is complete a ring of zinc-white is of value in the preservation of the specimen. The fluid consists of liquor acidi arseniosi (U. S. P.), one fluid ounce; salicylic acid, half a grain; glycerine, two fluid drams. Warm slightly until solution is effected, then add acacia (whole tears), and warm again until solution is saturated; after subsidence, decant clear supernatant fluid. A drop of formalin (40 per cent.) may be added to this mixture if desired. Plates are given showing specimens mounted two and a half years before, and show every feature possessed by casts studied from the same urine after the usual methods employed.

*N. Y. Med. Jour., Nov. 4, 1899.

Entrance of Air Into the Circulation.—J. D. MCPHERSON.* The intent of this article is particularly to call the attention of post-mortem examiners to the necessity of examining for air in the cavities of the heart and coronary arteries in cases of sudden death, especially those in which an abortion may presumably have been attempted or performed. When the chest cavity is opened, and the heart is exposed, the coronary arteries should be examined carefully for the presence of air. If present, a crackling sensation will be felt by the finger. It may also be seen to be present by the blood column being divided into sections. When the finger is drawn along the transparent walls of the artery the blood may be seen to move in divided portions. A further demonstration will be had when the heart cavities are opened, the foaming character of their contents being manifest. The method for the induction of abortion by the introduction of a catheter into the uterus and then injecting water, may lead to sudden death by the introduction of air if the bulb of the syringe is not divested of air by submersion previous to forcing the water through the catheter. The presence of gas in cases of great tympanites is sufficient to force air into the circulation and thus furnish a clew to the patient's sudden collapse.

SURGERY.

Intestinal Lesions Associated With Intra-Abdominal Operations.—T. A. ASHBY.† The intestinal complications that may be encountered in the course of any operation within the abdomen may vary from a simple adhesion to an extensive destruction of the bowel, necessitating resection of an entire segment. The most common lesions are adhesions which attach bowel walls to each other or to adjacent structures. These adhesions usually result from attacks of peritonitis, both local and general. They are often associated with various forms of intra-abdominal tumor. Pyosalpinx may extend to the rectum, sigmoid and ileum, and so completely destroy the bowel as to necessitate a resection. Fecal fistulæ following abdominal operations are not uncommon, nor are they necessarily fatal lesions. Accidental wounds inflicted on the bowel in the course of an abdominal operation present usually the simplest problems connected with intestinal lesions. Extensive wounds may require resection of a part or of an entire segment. In resecting the bowel all injured or infected portions should be removed, so as to approximate healthy tissue; the bowel should be carefully dried and replaced in the abdomen; the abdomen is closed

*N. Y. Med. Rec., Nov. 11, 1899.
†Jour. A. M. A., Nov. 11, 1899.

as for celiotomy. End-to-end anastomosis, with the Murphy button is employed to the best advantage in cases requiring rapid work. Resection should follow after the removal of the primary condition. End-to-end anastomosis with suture is the ideal operation for primary conditions of the bowel. It is usually too slow in its steps for general adoption in cases requiring other operative procedures within the pelvis. Five cases are cited to illustrate the value of the Murphy button when resection of the bowel was made necessary by the complications associated with intra-abdominal operations.

Congenital Absence of the Fibula.—TAYLOR* reports a case of congenital absence of the fibula. The tibia on the affected side is shortened, thickened and bowed forward, the total shortening of the affected leg amounting to five inches. Patient has good use of the hip and knee, but the foot is stiff and everted. There is not much to be done for these cases surgically, except to correct the position of the foot and the bowing of the tibia, which may be often best accomplished by osteotomy of that bone. These patients usually walk well with high patten, with additional supporting apparatus if required.

Four Cases of Cerebellar Abscess.—B. A. RANDALL† reports four cases, one resulting in recovery, and two coming to autopsy. They illustrate the difficulties of diagnosis in the matter of intracranial abscess, especially in the cerebellum. Delay in waiting for localizing symptoms, when other signs of the presence of an abscess are in evidence, often makes surgical intervention useless. Though examination of the aural and general condition must be made, and the facts and possibilities carefully weighed and stated to the friends, permission should be asked for intracranial exploration as soon as this is judged to be advisable. When operation is decided on, its exploratory character must not be lost sight of, and if localization is not conclusive, alternate procedures should be planned and compared. All caries is to be followed up and radically dealt with, never sparing the dural surface of the bone if this be even suspicious. But the dura must not be lightly opened when intact. Examination of the parietal lobe or cerebellum from the mastoid opening is not advisable; it is simpler and safer to make a separate skin flap and a formal cranial trephining at the points of election, even though the dura of the middle and cerebellar fossæ have been uncovered in the mastoid work. However the exigencies of the case may forbid such time-consuming divisions of the operation; it would be useless to have been strictly aseptic on a patient lifeless from shock.

*Pediatrics, Oct. 1, 1899.

†Jour. A. M. A., Nov. 11, 1899.

Pamphlets Received

The Conservative Treatment of the Myomatous Uterus, by Hunter Robb, M.D. (Reprint from the *American Journal of Obstetrics*, 1897.)

The Bacteria Occurring in the Female Genital Canal and Their Relation to Endometritis, by Hunter Robb, M.D. (Reprint from *Cleveland Medical Gazette*, 1897.)

The Intra-Uterine Application of Chloride of Zinc, by Hunter Robb, M.A. (Reprint from *Cleveland Medical Gazette*, 1897.)

Case of Papilloma of the Ovary, by Hunter Robb, M.D. (Reprint from *Cleveland Medical Gazette*, 1897.)

The Influence of Extirpation of the Ovaries Upon Structural Changes in the Uterus, by Hunter Robb, M.D. (Reprint from *Cleveland Medical Gazette*, 1898.)

The Opening of the New Lakeside Hospital, by Hunter Robb, M.D. (Reprint from *Cleveland Medical Gazette*, 1898.)

Secondary Abdominal Pregnancy After Traumatic Rupture of the Uterus in the Fourth Month; Laparotomy; Recovery; by Hunter Robb, M.D. (Reprint from *Cleveland Medical Gazette*, 1897.)

A Case of Exdothelioma Lymphangiomatodes of the Cervix Uteri, by Hunter Robb, M.D. (Reprint from *Transactions of American Gynecological Society*, 1898.)

Chronic Interstitial Nephritis, Treatment of the Heart Therein, by Arthur R. Elliott, M.D. (Reprint from *Journal of the American Medical Association.*)

Some Remarks on Chronic Bright's Disease, by Arthur R. Elliott, M.D. (Reprint from *Medical Record.*)

Empiricism in Missouri and How to Suppress It, by E. L. Priest, M.D. (Reprint from *Kansas City Medical Index-Lancet.*)

Accessory Thyroid Tumors at Base of Tongue; Report of Cases, by Jacob E. Schadle, M.D. (Reprint from *Journal American Medical Association.*)

Nosophen as a Substitute for Iodoform, by D. A. K. Steele, M.D. (Reprint from *The Chicago Clinic.*)

Advice to Gonorrheal Patients, by Fred C. Valentine, M.D. (Reprint from *Philadelphia Medical Journal.*)

Modern Therapy of the Tympanic Cavity, by M. A. Goldstein, M.D. (Reprint from *New York Medical Journal.*)

Rubber Gloves or Gauntlets, Their Use by Physicians and Surgeons, by J. E. Summers, Jr., M.D. (Reprint from *Journal American Medical Association.*)

Nephro-Ureterectomy for Traumatic Hemato-Hydro-Nephro-Utereterosis, by John E. Summers, Jr., M.D. (Reprint from *Medical Record.*)

Practical Therapeutics.

Treatment of Burns.—The use of picric acid in the treatment of burns is occasionally referred to, and it is apparently meeting with some support. A recent recommendation found in the *International Journal of Surgery* is to employ in the treatment of burns a solution of seventy-five grains of picric acid dissolved in alcohol, which is added to a quart of water. This is said to be aseptic and analgesic. Of course, it should not be used after granulations have taken place. In the discussion before the French Academy of Surgery last year, it was claimed that the picric acid was no advance upon the old methods of treating burns. That it is not devoid of danger is shown by Dr. Brun, who reported a fatal case of poisoning due to its external application.

Indigestion.—As long as people will be unwise in matters of diet, just so long will physicians be called upon to treat all forms of indigestion. It, therefore, is well to consider a remedy which is suitably adapted to this condition. We desire to call attention to ingluvin for treatment of all forms of dyspepsia. It is a bland preparation of the ventriculus callosus gallinaceous. It has a property of soothing the irritated gastric mucous membranes and re-establishing a normal secretion of the digestive fluids. It has time and again proven itself superior to pepsin. Its prescription is attended with more certain results than pepsin. Whenever pepsin is indicated try ingluvin. It will give more satisfaction. Messrs. Wm. R. Warner & Co., Philadelphia, the manufacturers, will send you sample upon request.

A Case of Ulceration of Womb and Cervix.—T. J. BIGGS* reports the case of Miss C. G., aged twenty-four; admitted Sept. 10, examination revealing severe ulcerative endometritis, accompanied by profuse leucorrhea of the most fetid character. On the cervix, posteriorly, grew a polypus as large as an English walnut. The condition was of two years' standing, during which time it had been under constant treatment by a succession of physicians, had been twice curetted, but in spite of all efforts had gradually grown worse. There had been no menses for the last six months, but when they were due she suffered severe neuralgic pains, confined to the ovaries.

A regimen of bovinine—a teaspoonful in milk—grape-juice, old port wine and beer, alternating every two hours, was undertaken. She was put to bed on the 11th, and hot douches of Thiersch, four quarts, were ordered night and morning. The following day a bovinine tampon was applied well back in the cul-de-sac of Douglas, as there was a slight misplacement. On the 16th the polypus was removed by torsion, the surface exposed was touched up, 25 per cent. pyrozone, and an iodoform-bovinine tampon was applied. (That surface was completely healed by the 25th.) On the 26th the uterus and cervix were thoroughly curetted, removing, together with the granulations, two smaller polypi of the size of hazel nuts. The bovinine-peroxide reaction was then applied by injection into the uterus, and the product washed out as usual with Thiersch solution. The womb was then packed with bovinine gauze, prepared in the following manner: Narrow strips of bi-sterilized gauze a yard long were dipped in bovinine, wrung out, and packed into the uterine cavity; a bovinine tampon was inserted, and a napkin and T-bandage applied. This treatment and dressing were repeated on the 27th and 28th. About 4 P.M. on September 30th, menstruation appeared fully and freely, without any pain whatever, and lasted until October 3d. On the 4th, examination found the mucous membrane lining the vagina thoroughly anemic, and it was therefore determined to employ local feeding, as well as support to the womb, which is necessary after all cases of curettement. Bovinine tampons were applied daily until the 12th, and every other day thereafter until the 1st of November.

On September 23d the initial lesion of syphilis appeared, and the patient was accordingly put upon bovinine and biniodid.

November 1st the bovinine had been increased to a tablespoonful every three hours. On the 14th the bovinine tamponing was changed from every other day to twice a week. The condition of the uterus and cervix was now entirely well; the mucous membrane of the vagina was much improved, but was decidedly anemic; consequently the womb and vagina were thoroughly sprayed with bovinine every night until December 10th. After this date a tampon was applied daily of boroglycerol, glycerin and alum, when the patient was allowed to go out walking, in order to support the womb and to contract the surrounding tissue, which had become more or less relaxed. On December 15th the eruption had entirely disappeared, as well as all other syphilitic symptoms. The patient was impressed, however, with the necessity of keeping up antisyphilitic treatment for at least two years. December 22d the patient was discharged, absolutely cured of uterine trouble, with instructions to continue bovinine—a teaspoonful every three hours in milk, grape-juice or old port wine; also one-fourth grain of protiodid of mercury every three hours; and to report at regular intervals.

*American Gynecological and Obstetrical Journal.

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